

## Replacement Instructions

# hp StorageWorks MSA1500 cs/MSA20 Power Supply

*These instructions apply to the MSA1500 cs and MSA20 product families. The part may also be used in other HP products. Please refer to documentation for your specific product for detailed replacement instructions.*



If the product in which this part is being replaced is still under HP warranty, then the replacement part(s) referred to in these Replacement Instructions is provided under the terms and conditions of the Hewlett-Packard Company Limited Warranty for that product. A copy of this Limited Warranty may be viewed at:

<http://h18006.www1.hp.com/products/storageworks/warranty.html>

If this is a trade sale part (product out of warranty), then the replacement part(s) referred to in these Replacement Instructions is provided under HP's express limited warranty statement, which may be viewed at:

[http://customerops.corp.hp.com/1sw/pdm\\_om/warranty\\_support/policies/2330100.doc](http://customerops.corp.hp.com/1sw/pdm_om/warranty_support/policies/2330100.doc)

The replacement part takes on either the Limited Warranty Period of the part being replaced or a ninety-day period that begins upon installation of the replacement part, whichever is greater.

The information contained on these replacement instructions is subject to change without notice. The only warranty for this replacement product is as noted above. Nothing in these replacement instructions should be construed as constituting an additional warranty. The information provided in these replacement instructions is provided "AS IS" and HP is not liable for technical or editorial errors or omissions contained herein.

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## About this document

This document details the procedures for replacing a failed power supply in an MSA1500 cs or MSA20 storage product.

## Verifying component failure

Before replacing the power supply, use the following methods to verify the component failure.

### MSA1500 cs

- Check the controller LCD for the error message listed in Table 1.

Table 1: LCD Error Message

No.	Message
409	STORAGE BOX #<n> POWER SUPPLY FAILED

### MSA20

- The enclosure fault indicator is amber ①.

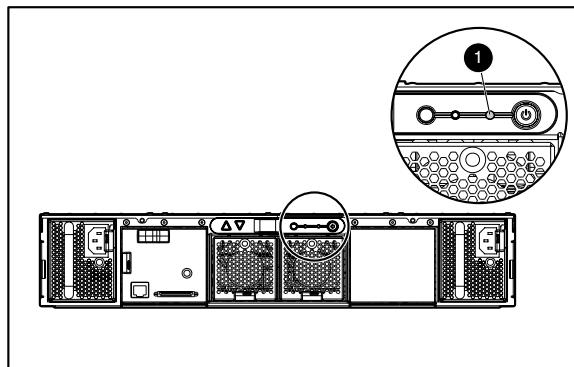


Figure 1: MSA20 enclosure fault indicator

### MSA1500 cs and MSA20

- The power supply indicator on the rear of the module is flashing amber. ①
- The system has power but the power supply indicator on the rear of the module is off ②.

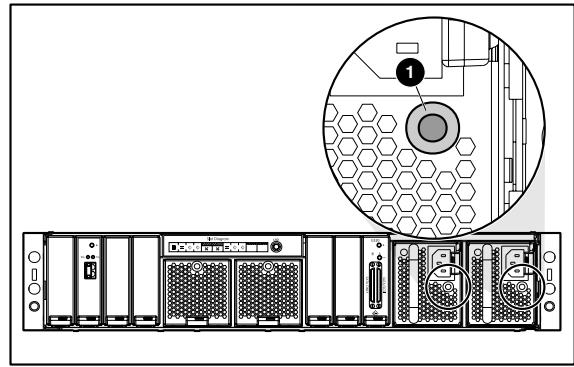


Figure 2: Power supply indicator

## Before you begin

Read the following cautions and information before beginning removal and replacement procedures.



**Caution:** Be sure the replacement part is available before removing the failed component. Removing a component impacts cooling within the enclosure.



**Caution:** Parts can be damaged by electrostatic discharge. Use proper anti-static protection. Refer to the documentation that shipped with your system for additional information.



**Caution:** It is important to follow these instructions when replacing components in the MSA. If the procedure is done improperly, it is possible to lose data or damage equipment.



**Caution:** Before replacing this hot-pluggable component ensure that steps have been taken to prevent loss of data.

**Note:** Some of the illustrations in this document may show a different unit. However, the replacement instructions are the same for all units in the MSA family using this component.

## Step 1: Removing the power supply

1. Disconnect the AC power cord from the failed power supply.
2. While pushing the power supply port-colored module latch **1**, pull the power supply out of the enclosure **2**.

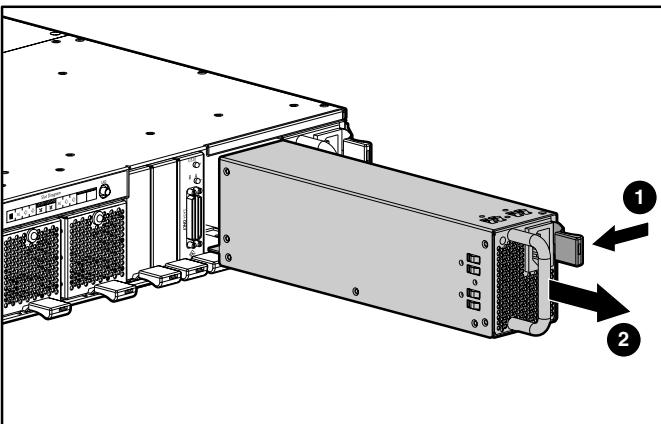


Figure 3: Removing the power supply

## Step 2: Installing the power supply

1. Remove any connector protector that may be covering the power connector on the front of the new power supply.
2. Install the replacement power supply by pushing the power supply module latch to the left and pushing in the base until the assembly is fully seated in the enclosure.

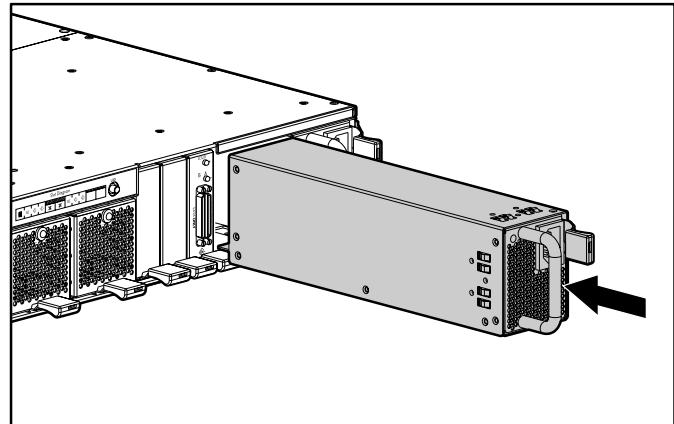


Figure 4: Installing the replacement power supply

3. Connect the AC power cord to the new power supply.

## Verifying the replacement

After replacing the failed power supply, verify that:

### MSA1500 cs

- Check the controller LCD for the message listed in Table 2.

Table 2: LCD Verification Message

No.	Message
408	STORAGE BOX #<n> POWER SUPPLY OK

### MSA20

- The MSA20 enclosure fault indicator is no longer illuminated (Figure 1, **1**).

### MSA1500 cs and MSA20

- The power supply indicator on the rear of the module is solid green (Figure 2, **1**).

## Returning the failed component

Please follow the return instructions provided in the replacement component package.

## Additional information

For additional information on the MSA1500 cs, refer to the MSA technical documents web site at <http://www.hp.com/go/msa1500cs>.

For additional information on the MSA20, refer to the MSA technical documents web site at <http://www.hp.com/go/msa20>.